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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/557,690 | 04/25/2000 | Hung Nguyen | 68702 | 8537 |

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| EXAMINER |
|---|
| RAMPURIA, SHARAD K |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2683 | |

DATE MAILED: 12/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/557,690 | NGUYEN ET AL. | |
| | Examiner | Art Unit | |
| | Sharad Rampuria | 2683 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10/11/2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang in view of Sobel et al.

1. Regarding claim 1, Hwang disclosed a receiver capable of receiving a plurality of different codes (CAP code) at a plurality of different frequencies, comprising: an input device (10; Fig.2) for selection among a plurality of different codes and a plurality of different bit patterns (Col.2; 60- Col.3; 5 & Col.3; 50-60) an antenna for receiving a receiver actuation signal (Fig.2); digital frequency control circuitry (Col.3; 35-45); a controller (13; Fig.2) for comparing said received receiver actuation signal to said code and bit pattern selections; and output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit pattern selections. (Col.3; 58- Col.4; 7; Fig.2)

Hwang fails to disclose the plurality of different bit patterns differ from one another with respect to packet length. However, Sobel teaches in an analogous art, that wherein at least some of the plurality of different bit patterns differ from one another with respect to packet length (346; Fig. 6c; Col.7; 58 – Col.8; 5 & Col.3; 49-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the plurality of different bit patterns differ from one another with respect to packet length in order to operate a multitude of different codes at different frequencies.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang, & Sobel further in view of Holmes.

2. Regarding Claim 2, Above combination discloses all the particulars of the claim except a diode and bandpass filter. However, Holmes teaches in an analogous art, that the receiver of claim 1 wherein said digital frequency control circuitry comprises a signal diode (Fig.2A; Col.7; 26-37) capable of adding and removing discrete components from a bandpass filter (Fig.2A; Col.7; 26-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a diode and bandpass filter in order to improve filtering the incoming frequency.

Claims 3-4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang, Holmes, Sobel further in view of Schulze.

3. Regarding Claim 3, Above combination discloses all the particulars of the claim except a multiposition switch. However, Schulze teaches in an analogous art, that the receiver of claim 2 wherein said input device for selecting among a plurality of different codes is a multiposition switch. (220; Fig.2; Col.6; 50-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a multiposition switch in order to switching different codes.

4. Regarding Claim 4, Hwang discloses all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the receiver of claim 2 wherein said input device for selecting among a plurality of different bit patterns is a DIP switch. (DIL; 210; Fig.2; Col.6; 50-65) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang, & Freen further in view of Sobel et al.

5. Regarding Claim 5, Hwang discloses, an input device (10; Fig.2) for selection among a plurality of different codes and a plurality of different bit patterns; an antenna for receiving a receiver actuation signal; digital frequency control circuitry (Col.3; 35-45);a controller (13; Fig.2) for comparing said received receiver actuation signal to said code and bit pattern selections; and output circuitry for responding to the receipt of a receiver actuation signal that matches said code and bit

pattern selections. (Col.3; 58- Col.4; 7; Fig.2). He fails to a super-regenerative receiver. However, Freen teaches in an analogous art, a super-regenerative receiver (Fig.1; Col.2; 15-22) capable of receiving a plurality of different codes at a plurality of different frequencies. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a super-regenerative receiver in order to improve signal transmission in a noisy environment.

Hwang fails to disclose the plurality of different bit patterns differ from one another with respect to packet length. However, Sobel teaches in an analogous art, that wherein at least some of the plurality of different bit patterns differ from one another with respect to packet length (346; Fig. 6c; Col.7; 58 – Col.8; 5 & Col.3; 49-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the plurality of different bit patterns differ from one another with respect to packet length in order to operate a multitude of different codes at different frequencies.

Claims 6-7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitschel et al. in view of Sobel et al.

6. Regarding claim 6, Hietschel disclosed a radio frequency receiver (41; Fig.2) for receiving a plurality of actuation signals from a movable barrier operator transmitter, each receiver being capable of receiving a plurality of coded signals at a plurality of different frequencies, comprising: first and second user-selectable input devices (19; Fig.2) for selecting a specified code and a specified

frequency for receiving said actuation signals (Col.3; 11-18); a controller (38; Fig.2) coupled to said input devices for processing said code and frequency selections and outputting data responsive to said input; and receiver circuitry responsive to said controller output data for receiving particular actuation signals at one frequency and receiving particular other actuation signals at another frequency. (Col.3; 1-18)

Heitschel fails to disclose the plurality of different bit patterns differ from one another with respect to packet length. However, Sobel teaches in an analogous art, that wherein at least some of the plurality of different bit patterns differ from one another with respect to packet length (346; Fig. 6c; Col.7; 58 – Col.8; 5 & Col.3; 49-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the plurality of different bit patterns differ from one another with respect to packet length in order to operate a multitude of different codes at different frequencies.

7. Regarding claim 7, Hietschel disclosed the radio frequency receiver of claim 6, wherein said first user-selectable input device comprises a multi position switch (23; Fig.2) which determines a particular code to be received as said actuation signal based upon the position of said multi-positioned switch. (Col.3; 14-18)

9. Regarding claim 9, Hietschel disclosed the radio frequency receiver of claim 8, wherein said controller processes the code and bit sequence selections (Fig.5) from said input devices and outputs data according to said input to said

receiver circuitry causing said receiver circuitry to receive particular data at one frequency and other data at another frequency. (Col.3; 19-30)

Claim 8, is rejected under 35 U.S.C. 103(a) as being unpatentable over Heitschel et al., Sobel et al. further in view of Schulze.

8. Regarding claim 8, Above combination disclosed all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the radio frequency receiver of claim 7, wherein said second user-selectable input device comprises a dual in-line packaged switch (DIL; 210; Fig.2; Col.6; 50-65) having a plurality of inner switches which determine a particular bit sequence to be received as said actuation signal based upon the position of said plurality of inner switches. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

Claim 10, is rejected under 35 U.S.C. 103(a) as being unpatentable over Sobel et al. in view of Holmes.

10. Regarding claim 10, Sobel disclosed a method of digitally controlling the frequency of a receiver comprising the steps of: providing a signal diode (D4; Fig.1; Col.5; 12-18) ; providing a controller(12; Fig.1; Col.5; 12-18) for controlling the operation of said signal diode to alter the discrete component makeup.

Sobel fails to disclose a bandpass filter. However, Holmes teaches in an analogous art, that providing a bandpass filter (Fig.2A; Col.7; 26-37); connecting additional discrete components to said bandpass filter and outputting signals to said diode to alter the bandpass filter frequency. (Col.8; 44-54) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a bandpass filter in order to improve filtering the incoming frequency.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 11-12, are rejected under 35 U.S.C. 102 (e) as being anticipated by Sobel et al.

11. Regarding claim 11, Sobel disclosed a method of receiving a receiver actuating signal comprising the steps of: providing a receiver having multiple input devices coupled to a microprocessor (12; Fig.1) and receiver circuitry; adjusting said

receiver circuitry to receive a particular code at a particular frequency based on the position of said multiple input devices and output from said microprocessor; and receiving said receiver actuating signal.(Col.3; 43-64)

12. Regarding claim 12, Sobel disclosed the method of claim 11 wherein one of said multiple input devices is a multi-positioned switch (36, 38; Fig.1) which determines the code to be received as said receiver actuating signal based upon the position of said multi-positioned switch. (Col.3; 43-64)

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sobel in view of Schulze.

13. Regarding claim 13, Sobel disclosed all the particulars of the claim except a DIP switch. However, Schulze teaches in an analogous art, that the method of claim 12 wherein another of said multiple input devices is a dual in-line packaged switch (DIL; 210; Fig.2; Col.6; 50-65) having multiple inner switches which determines a bit pattern to be received as said receiver actuating signal based upon the position of said inner switches. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a DIP switch in order to switching different bit patterns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Thu.(6:30-4) alternate Fri.( 6:30-3).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

SK
December 19, 2002

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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